

Apr 12th, 10:40 AM - 11:10 AM

Public Capital Budgeting in Germany

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Ermasova, Natalia, "Public Capital Budgeting in Germany" (2019). *GSU Research Day*. 16.
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Research Day GSU 2019

Public Capital Budgeting in Germany

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GSU, 2019



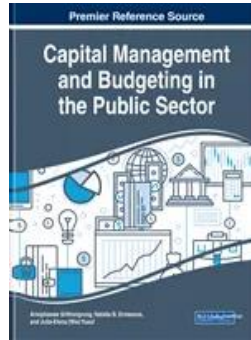
Purpose of Study

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The analysis of long-term public capital planning and public infrastructure finance in Germany.



Capital Management and Budgeting in the Public Sector



Capital Management and Budgeting in the Public Sector

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Release Date: January, 2019

Analysis of Germany Infrastructure

- In 1990, Germany had growth rate of gross fixed capital formation 8.0%.
- This growth rate decreased during global financial crisis in 2010 to -10.1 % and in 2013-2014 to -1.1 %.
- Due to decreasing of capital investments, Germany decreased from third on a list of countries with the best infrastructure in 2008 to seventh place in 2013 and tenth place in 2017.



The ranking of countries based on conditions of their infrastructure in 2017

| Ranking | Countries | Score |
|---------|----------------------|-------|
| 1 | Hong Kong | 6.7 |
| 2 | Singapore | 6.5 |
| 3 | Netherlands | 6.4 |
| 4 | Japan | 6.3 |
| 5 | United Arab Emirates | 6.3 |
| 6 | Switzerland | 6.3 |
| 7 | France | 6.1 |
| 8 | Korea, Rep | 6.1 |
| 9 | United States | 6.0 |
| 10 | Germany | 6.0 |



Public investments in Germany

- Public investments are around 10% of total investments in Germany.
- The federal government, the regional (*Länder*) and the local authorities each accounted for roughly a third of total government investment

The gross and net public investments across levels of government in 2016 (bln. €)

| Indicators | Total invest-ments | Total public invest-ments | Federal level | the <i>Länder</i> level | Local level | Social insurance funds |
|-------------------|--------------------|---------------------------|---------------|-------------------------|-------------|------------------------|
| Gross investments | 603,591 | 66.3 | 20.1 | 22.0 | 23.3 | 0.9 |
| Depreciation | 552,291 | 68.6 | 18.4 | 19.8 | 29.3 | 1.2 |
| Net investments | 51,300 | - 2.3 | 1.7 | 2.8 | -5.9 | -0.3 |

Government investments

- General government investments are focused on defense, healthcare, social protection, and environment protection. The federal investment spending is in the sectors of transport and defense and was around 2% of the federal budget in 2017.
- Most of subnational investments in Germany are dedicated to economic affairs (transport, general economic, commercial affairs, industry, agriculture, etc.).
- The investments spending on municipal level are in the sectors of water supply and waste disposal.

Capital Budgeting and Financial Management

- Capital budgeting for capital projects are integrated into the ordinary budget process like in most OECD countries.
- Capital investments have not a separate framework and process, they are identifiable in the budget, but it is treated as any other expenditure in the process.
- The appropriation allocated in the budget is not for a single capital project but in a portfolio of capital projects within a relevant category (e.g. road or rail investment).

The Federal Ministry of Finance

- a key role in capital budgeting to ensure that the capital project portfolio fits into the long-term capital budget envelope.
- monitor the investments projects as it moves from the project identification stage to the preparation stage, procurement stage and implementation stage

The political support for a project can be more important than what technical cost/benefit estimates.



The Federal Ministry of Finance

- Checked contracts with regard to their soundness, realism, and budgetary viability.
- Evaluations based on cost-benefit analysis that includes following components: reduced transportation costs, travel time, safety benefits, security, regional economic and social impact, job creation, and derived economic effects.
- According to Section 24 of the federal budget code, the Federal Ministry of Finance has to approve the necessary documents for construction of buildings before expenditure is allocated in the budget.



The Federal Ministry of Transport

- A multiannual planning framework in the form of the federal transport infrastructure plan (12-15 years).
- The federal transport infrastructure plan takes the form of a “long list” of projects
- Inputs from the political level, sub-national governments and other stakeholders.
- Detailed agreements across levels of government have to be reached before the investment plan is adopted.

Infrastructure and network plans in Germany:

- Federal Transport Infrastructure Plan
- Federal Regional Policy Plan
- Trans-European Transport Networks
- Energy Network
- 16 Länder-level plans, regional development plans & programs, regional project plans
- Sector-specific plans such as energy plan or mining in North Rhine-Westphalia.

Federal Transport Infrastructure Plan (FTIP 2030)

- Has been adopted by the Federal Cabinet in 2013-2014.
- The total level of funding provided by the FTIP 2030 is around €269.6 billion (roughly \$300 billion) on construction and modernization of the country's infrastructure over the next 15 years
- The structural maintenance of the existing road, rail and waterway networks alone will require around €141.6 billion between 2016 and 2030.
- This plan prioritizes repairing existing systems with 70 percent of funds allocated toward maintenance



The Federal Transport Infrastructure Plan

- The Federal Transport Infrastructure Plan (FTIP) 2030 earmarks investment of €98.3 billion for upgrading and new construction of road infrastructure.
- The roads accounts for 49.3 %, the rails accounts for 41.6 % and the waterway accounts for 9.1 % of total funds.
- For the structural maintenance and upgrading of the transport networks, the target in the FTIP period from 2016 to 2030 is an average level of funding of around €15 billion per year.



National Reform Program 2016

- Federal Ministry for Economic Affairs and Energy :
“investment is key to securing long-term growth and employment potential and to continued survival in the face of global competition for the best ideas, products and talents.”
- More than €45 billion in financial relief to the Länder and municipalities until 2019 to boost their scope for investment



Execution and Project Management on Länder' Levels: Example

- Brandenburg received federal subsidy EUR 457.1 million due to co-financing requirements for regional and local governments.
- 84% of the financing was mandated for municipal infrastructure development.
- The law required a minimum of 65% of the support to go to educational infrastructure, the rest to other types of infrastructure.
- In addition, the Brandenburg Land government used the program to top up the funding for less economically developed areas.



Problems

- The majority of federal government's spending is earmarked for the long term and it was difficult to make additional investments.
- The municipalities have reduced their investments, because of increased social spending and financial problems.
- The Länder are also cutting back on capital spending in preparation of tighter budget rules that will come into force in 2020.



Problems

- The quality of road infrastructure dropped from the fifth position in the 2009-2010 report to the 16th place in the 2015-2016 (Van der Putten, 2017).
- According to the German Institute for Economic Research (DIW), this negative trend could be stopped, but to do so, Germany would have to invest at least an additional €10 billion a year. That includes €3.8 billion for maintenance of capital infrastructure and €2.65 billion for renovations that were neglected in the past period.



Problems

- Local governments spending on capital investments dropped from 17% of their total expenditure in 1995 to only 9.7% in 2015
- These changes in capital investments are largely a result of the expansion of municipalities' responsibilities in the area of social security. The municipal social spending increased in two times from 2002 to 2010.
- Maintaining the capital infrastructure at the same level requires a permanent increase in spending by at least € 4 billion



Private investments

- According to Federal Ministry for Economic Affairs and Energy (2016), 90% of all investment in Germany is private investment.
- The willingness of private companies to invest depends on hard-to-influence factors, like the overall economic situation, expected profits and interest rates.
- The German government invested €15 billion during 2016-2018 is intended to spur needed private investment



Public-Private Partnership procurement model (PPP- ÖPP in German)

- The federal budget documentation contains an annex that gives an overview of all PPP projects and life cycle commitments of the federal government derived from the PPP contract
- In the ÖPP partnerships, an investor funds projects with private capital or borrowed money and, in return, receives a fee from users or from the government.
- A standard life span of these ÖPP partnerships is 30 years in Germany.



PPP: Example

- A1 autobahn extension between Bremen and Hamburg with a length of 73 kilometers (45 miles). A consortium that includes engineering and services group Bilfinger financed the construction.
- This consortium receives a monthly payment from the government from 2008 to 2038. Those payments come from truck tolls and depends on the volume of truck traffic along the stretch of highway A1 autobahn extension between Bremen and Hamburg.



The Federal Audit Office: Problems with PPP

- costs of financing infrastructure via public-private partnerships were higher for ÖPP project than they were for conventionally funded enterprises.
- examined seven large, privately financed road-construction projects and found that five of them would have been cheaper if government without ÖPP partnerships would pay them.
- The total savings were estimated at €1.9 billion.



The German *Schuldenbremse* - "debt brake"

- 2009 provision *Schuldenbremse* limits the ability of German governments to run a deficit, prohibit unlimited borrowing.
- ÖPP projects provide possibility to avoid this "debt brake".
- The Federal Audit Office warns that this could provide additional incentive to turn over the construction of roads and building to private investors, even though the conventional approach would be more affordable.
- In the case of highways, public-private partnerships have been met with great resistance by citizens who opposed to the introduction of tolls for passenger cars.



Conclusions

- The reason for Germany's relative decline of infrastructure conditions is the lack of public investment spending on infrastructure.
- Public capital spending has settled at around 2.2% of GDP. This is one of the lowest ration in the EU. For comparison, in France, public investment was 3.5% in 2015.
- As part of its investment strategy the German Federal Government has already initiated numerous measures to stimulate private and public investments in Germany

Questions & Answers

Thank you !



Additional information

- Institutions may affect public infrastructure management practices by the government around the world.
- The contribution of the book *Capital Management and Budgeting in Public Sector* is the explanation as to why each country manage public capital budgeting the way they are doing.
- The German capital management practice is one of the 12 samples in the book.